

A NEW *EUPHORBIA* FROM SOUTH WEST AFRICA

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ABSTRACT

A new tuberous rooted dwarf *Euphorbia* with a very restricted distribution on the Namuskluft, near Rosh Pinah, just north of the Orange River, is described. Vegetatively indistinguishable from *E. wilmaniae* Marl., its floral and fruiting characteristics are entirely different.

UITTREKSEL

'N NUWE *EUPHORBIA* VANAF SUIDWES-AFRIKA

'n Nuwe dwerg *Euphorbia* met 'n wortelknol en met 'n baie beperkte verspreiding op die Namuskluft, naby Rosh Pinah, net noord van die Oranjerivier, word beskryf. Vegetatief nie te onderskei van *E. wilmaniae* Marl. nie, maar blom- en vrugtekenmerke verskil heeltemal.

Key words: *Euphorbia*, sp. nov., Euphorbiaceae, South West Africa/Namibia, Garipe Centre.

Euphorbia namuskluftensis Leach, sp. nov. ad *E. wilmaniae* Marl. in characteribus vegetativis simillissima sed illa glandulis non prominenter rugosis sine processibus dactylinis; ovulo vix exserto seminibusque minoribus proportione angustioribus statim distinguenda.

Planta dioecia, succulenta, inermis, ramosissima; ramis ramulisque aeriis confertis, raro in longitudinem 20 mm attingentibus; radice tuberosa rhizomatosa, solum in terra calcarea crescens. Rami ramulique tuberculati, estipulares micro-scabrelli, c. 5 mm crassi. Folia carnosa, ovata, acuta, leviter plicata, patulo-recurva, variabiliter micro-scabrella, decidua, cicatrice brunnea tuberculi ad apicem remanenti. Inflorescentia axillaris, ad apicem ramorum, plerumque cyathio solitario unisexuali in pedunculo bracteato portato. Bractee plus minusive oblongae, aliquanto obtusae, irregulariter denticulatae, plerumque apicula breviter plicata, acuta, recurva instructae, anguste subpellucido-marginatae, saepe in superficie sparsim pubescentes. Cyathium glabrum vel raro sparsissime micro-scabrellum, 2-3 mm longum, c. 3 mm diam.; glandulae 5, erectae, aliquanto cuneatae, 1-2,25 mm latae, parum bilabiatae, labio interiore parvulo, infra laeves, atro-virides, supra pallescentes, perleniter rugulosae, recurvae; lobi 5, subquadrati, c. 1 mm longi, ir-

Accepted for publication 13th January, 1983.

regulariter fimbriati, utrinque pilosi. *Involucrum*, femineum intus glabrum, apice piloso excepto; florum, seporum, bracteolarumque vestigiis instructum. *Flos femineus*, pedicello sparsim minute puberulo, c. 0,5 mm longo suffultus; ovarium subglobosum subsessile; stylis crassis, in columnam basi connatis, partibus libris patulo-recurvis, ad apicem breviter bifidis, lobis patulis valde recurvis. *Involucrum* masculinum intus versus apicem pilosum, septis 5; septa ad medium in lobis duobus plumosis bracteoliformibus divisa. Flores masculi c. 40, aliquot bracteolis plumosis, c. 2 mm longis; *pedicelli* pubescentes, albidii; *filamenta* pallide viridia, minute puberula, c. 0,75 mm longa; *antheris* atro-viridibus, polline flavido-aurantiaco. *Capsula* glabra, tantum ex involucri reliquiis exserta, subglobosa, leviter 3-sulcata, atro-brunnea, c. 5,75 mm diam., 4,75 mm alta. *Semen* late subovioideum, leviter ruminatoglobulosum, brunneo-cremeum, c. 3,5 mm $\times$ 2,5 mm.

Typus: S.W.A., Namuskluft, Lavranos & Pehlemann 20796 (PRE, holo; WIND).

Plant dioecious, much-branched, unarmed, succulent, rhizomatose-tuberous rooted, with the above ground crowded branches and branchlets seldom attaining 20 mm in height (plants in cultivation may develop branches up to 60 mm or more long, while rhizome-like underground branches are often longer). *Branches* and *branchlets* tuberculate, estipulate, micro-scabridulous, $\pm$ 5 mm thick. *Leaves* ovate acute, $\pm$ 1,5 mm long, spreading recurved, somewhat folded, fleshy, variably micro-scabridulous, deciduous, leaving a brown scar at the apex of the tubercle. *Inflorescence* axillary, at the apex of the branches, usually a single unisexual cyathium borne on a short, glabrous, bracteate peduncle with a pseudo-whorl of three bracts below the cyathium. *Bracts* quite different from the leaves, especially in the male plant, $\pm$ oblong, somewhat obtuse, irregularly denticulate, with a narrow subpellucid border, usually with a shortly folded, recurved, acute apicula, often somewhat pubescent on the upper surface. *Cyathium* glabrous or rarely very sparsely micro-scabridulous, green at the base becoming purplish above, 2–3 mm long, $\pm$ 3 mm in diam.; *glands* 5, erect, somewhat cuneate, 1–2.25 mm broad, slightly two-lipped, with a thickened rim and a small central lip on the inner margin, slightly concave, dark green, smooth below, becoming pale on the very faintly rugulose, recurved outer margin; *lobes* 5, subquadrate, $\pm$ 1 mm long, irregularly fimbriate, pilose both sides, more densely within. *Involucre* ♀, glabrous inside, except towards the apex, there pilose, particularly densely below the gland, with the rudiments of septa, ♂ flowers and bracteoles around the base (unusual in ♀ cyathia of unisexual species); ♀ flower, almost subsessile, *pedicel* sparsely minutely puberulous, $\pm$ 0,5 mm long; *perianth* rim-like; *ovary* subglobose; *styles* very stout, united at the base into a short stout column, $\pm$ 0,6 mm thick, $\pm$

0,5 mm long, the free portions spreading recurved. Male flowers, ± 40 , with a few plumose bracteoles, ± 2 mm long; *pedicels* ± 2 mm long, pubescent, whitish; *filaments* $\pm 0,75$ mm long, pale green, minutely puberulous; anther thecae dark green with yellow-orange pollen. *Capsule* glabrous, barely exerted from the remains of the cyathium, subglobose, shallowly 3-grooved, dark brown, $\pm 5,75$ mm diam., 4,75 mm high. *Seed* broadly sub-ovoid, shallowly ruminant-glebulose, brownish cream, $\pm 3,5$ mm $\times$ 2,5 mm.

MATERIAL EXAMINED

SOUTH WEST AFRICA—2716 (Witputz): Namuskluft (-DD), 1 200 m alt., restricted to white limestone outcrop, st. Oct. 1978, *Lavranos & Newton 16871* (K), cult. PRE, ♀ Sept. 1982, *Lavranos & Newton 17167* (PRE, WIND), *Lavranos & Pehlemann 20796* ♂ (PRE, WIND), 20797 ♀, fr. (PRE).

Euphorbia namuskluftensis is virtually indistinguishable from *E. wilmaniae* in habit and vegetative characters but differs widely in its floral, with

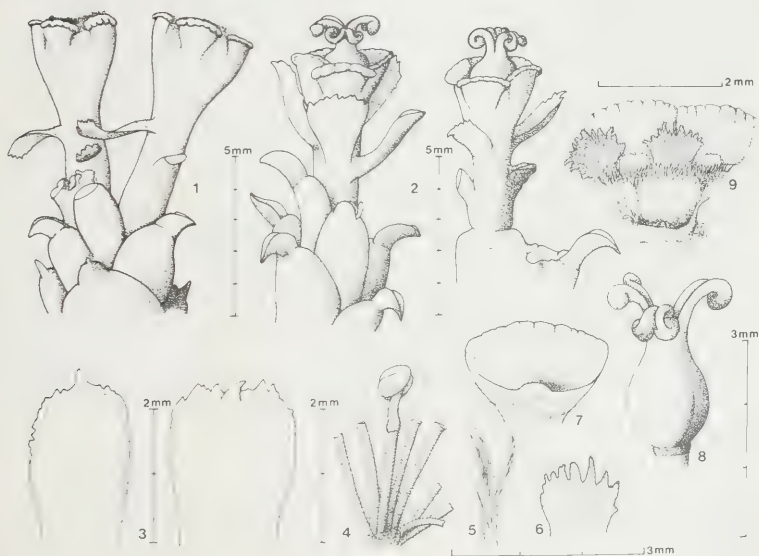


FIG. 1.

Euphorbia namuskluftensis Leach. sp. nov. 1. Male cyathia; 2. Female cyathia; 3. Peduncular bracts; 4. Fascicle of male flowers; 5. Bracteole; 6. Lobe; 7. Gland (flattened); 8. Female flower; 9. Female involucre.

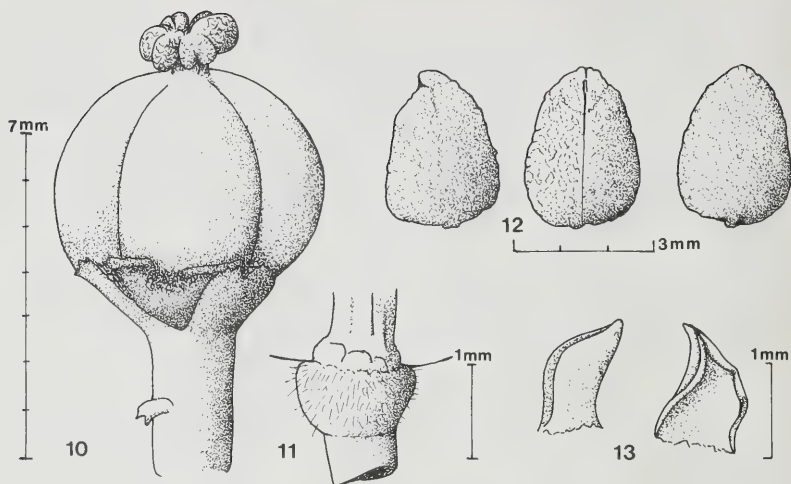


FIG. 2.

Euphorbia namuskluftensis Leach, sp. nov. 10. Mature capsule; 11. Perianth; 12. Seed; 13. Leaf.

smooth (not prominently rugose) glands which lack any sign of the characteristic finger-like processes of that species, and a sessile capsule with smaller proportionally narrower seeds.

This species has been found only on a white limestone outcrop on the Namuskluft, where it is associated with the recently described *E. lavrani* Leach. As with that species, the only plant in cultivation at PRE was female, and although clearly quite different from *E. wilmaniae* it was considered that the material available was inadequate for its publication as a new species. I am consequently most grateful to John Lavranos for returning to the locality and collecting a male plant with adequate mature material.